



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET, S.W.
ATLANTA, GEORGIA 30303-8960

January 25, 2018

(b)(6)

SUBJ: EPA Asbestos Removal at 225 Eden Street

Dear (b)(6) :

Enclosed, you will find the Removal Action Status Report for the property located at 225 Eden Street in Davidson, North Carolina. The report summarizes information regarding the original asbestos sampling, a description of the Removal Action conducted on the property, a summary of multimedia sampling results, details on the restoration of the property and the timeframe of the Removal Action. We have also included a figure of the removal area and the air sampling locations, a table of the air sampling results and photographs of the removal activities.

The removal activities have been completed and there are no further actions needed on the above-mentioned property. If you have any questions or need further information, please do not hesitate to contact Jordan Garrard, US EPA, Federal On-Scene Coordinator directly at (678) 644-8648, via email: garrard.jordan@epa.gov or myself directly at (678) 575-8132, via email: miller.angela@epa.gov, at any time.

It was such a pleasure working with you and your community. Thank you for your cooperation and patience throughout the removal activities.

Sincerely,

A handwritten signature in black ink, appearing to read "Angela R. Miller", is written over a horizontal line.

Angela R. Miller, US EPA
Community Involvement Coordinator

Enclosure(s)

cc: Jordan Garrard, US EPA, Federal On-Scene Coordinator
Miguel Alvalle, NC DEQ

REMOVAL ACTION STATUS REPORT DAVIDSON ASBESTOS

Property Address: 225 Eden Street, Davidson, Mecklenburg County, North Carolina

Original Asbestos Sampling Information: Surface soil samples were collected at a depth of 0 to 3 inches below ground surface (bgs) and subsurface soil samples were collected at a depth of 3 to 6 inches bgs. Analytical results are reported in increments of 0.25 percent asbestos.

Property Address	Area Sampled	Surface Soil Results (percent asbestos) 0-3 inches deep	Subsurface Soil Results (percent asbestos) 3-6 inches deep
225 Eden Street	Front Yard	0.25	0.5
	Back Yard	0.5	0.75

Description of Removal Action: The soil was excavated to an approximate maximum depth in the following areas: lawn to 36 inches; driveway area to 24 inches; and front yard, tree and residential drip line areas, and under the southern deck to 3 inches (See Appendix 1). Visual inspections of the areas excavated for asbestos-containing materials (ACM) were conducted by a State of North Carolina-accredited asbestos inspector and air monitor. Additional removal was conducted in those areas where ACM were still visibly present, except up to approximately 12 inches from the foundation of the western side of the residence and along the base of the carport and the street to prevent destabilization of their foundations. Once ACM was no longer visibly present throughout the main portion of the excavated area, restoration was allowed to commence. The visible remaining ACM was photographed and documented in the site logbook before restoration began.

Summary of Multimedia Sampling Results: Perimeter air sampling was conducted, at five stationary locations during removal activities on July 19 and from July 24 through July 25, 2017. Air sampling was conducted daily at one to three of those locations as weather permitted and based on wind direction and removal activities. The analytical results were less than the limit of detection and ranged from less than 0.00022 fibers per cubic centimeter (f/cc) to less than 0.0009 f/cc. Of the five perimeter air samples collected, sample DA-225ES-AA-L04-072417 contained one chrysotile asbestos fiber, but the analytical result was below the 0.001 f/cc action level (see Appendix 2). A 16-point composite soil sample was collected from the excavated areas before restoration began and the analytical result indicated no asbestos detected.

Perimeter air and composite soil samples were collected by a State of North Carolina-accredited air monitor with oversight from a State of North Carolina-accredited supervising air monitor (SAM).

Restoration of Property: Restoration work included installation of snow fencing and red "Danger Asbestos" tape on top of the subsurface of the excavated area to identify the depth excavated and the presence of ACM, backfill, topsoil, and sod in the excavated lawn areas, topsoil and mulch around the tree lines, snow fencing, backfill and two types of rock in the driveway, and breathable plastic sheeting and rock under the southern deck. All areas were restored to the original height of the surrounding grade.

REMOVAL ACTION STATUS REPORT DAVIDSON ASBESTOS

Time Frame of Removal Action: Removal activities began on July 19, 2017, and were completed on July 26, 2017.

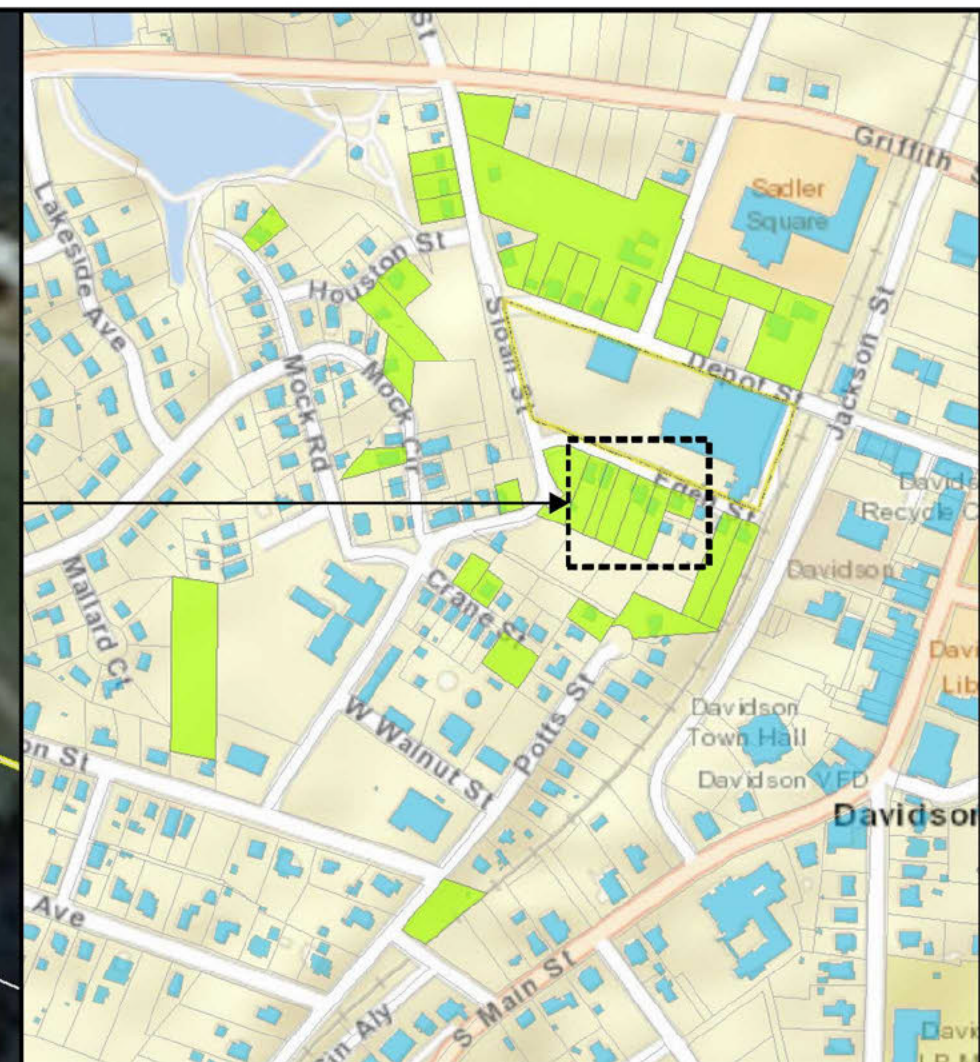
Appendices to this report include:

1. Figure of removal area and air sampling locations
2. Table of air sampling results
3. Photographic log of removal activities

APPENDIX 1

FIGURE

(One Page)

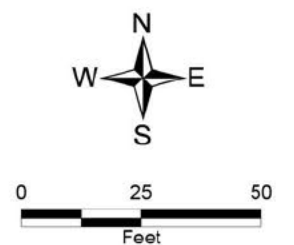


Legend

- Air Sample
- Removal Area
- Parcel Boundary
- Approximate Site Boundary

Inset Map

- Parcels with Removal Activities
- Building/Structure



Map Sources:
Aerial Imagery, Bing Maps, 2012-2014;
Parcels, <http://maps.co.mecklenburg.nc.us>



United States
Environmental Protection Agency
Region 4

FIGURE 1

Removal Areas and
Air Sampling Locations

TDD Name: Davidson Asbestos

TDD No.: TT-01-071

City: Davidson County: Mecklenburg State: North Carolina



Date:
9/21/2017
Analyst:
dale.vonbusch

225 Eden Street

APPENDIX 2

SUMMARY TABLE OF ANALYTICAL RESULTS

(One Page)

TABLE 1
TRANSMISSION ELECTRON MICROSCOPY RESULTS
DAVIDSON ASBESTOS
DAVIDSON, MECKLENBURG COUNTY, NORTH CAROLINA

Sample Id	Location	T	Pump No.	Time Start	Time Stop	Total (Min)	Pump Flow Rate (lpm)			Total Sample Volume (l)	PCM Results (f/cc)	Asbestos Fibers Detected	TEM Results in PCME (f/cc)
							Initial	Final	Average				
DA-225ES-AA-L01-071917	225 Eden Street - Location 1	AA	G4	8:40	15:53	433	9.97	10.03	10.00	4330.0	0.0018	0	<0.0006
DA-225ES-AA-L02-071917	225 Eden Street - Location 2	AA	G3	8:35	15:59	444	10.11	10.20	10.16	4508.8	0.0011	0	<0.00055
DA-225ES-AA-L03-071917	225 Eden Street - Location 3	AA	G5	8:45	16:01	436	10.40	10.40	10.40	4534.4	0.0013	0	<0.00022
DA-225ES-AA-L04-072417	225 Eden Street - Location 4	AA	G6	8:59	16:10	431	10.55	10.47	10.51	4529.8	0.00059	1*	<0.0009
DA-225ES-AA-L05-072417	225 Eden Street - Location 5	AA	G1	9:09	16:14	425	10.45	10.27	10.36	4403.0	0.00061	0	<0.00061
DA-225ES-AA-L05-072517	225 Eden Street - Location 5	AA	G3	7:59	15:06	427	9.74	9.32	9.53	4069.3	0.0019	0	<0.00063

* Analytical results for sample DA-225ES-AA-L04-072417 detected 1 chrysotile asbestos fiber. Analytical results were below the 0.001 f/cc action level.

Notes:

<: Less than

AA: Area air sampling

DA: Davidson Asbestos

ES: Eden Street

f/cc: Fibers per cubic centimeter

Id: Identification

l: Liters

lpm: Liters per minute

Min: Minutes

PCM: Phase contrast microscopy

PCME: Phase contrast microscopy equivalent

TEM: Transmission electron microscopy

APPENDIX 3
PHOTOGRAPHIC LOG
(10 Pages)



OFFICIAL PHOTOGRAPH NO. 1
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: South

Date: July 19, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: The Emergency and Rapid Response Services (ERRS) contractor, Environmental Restoration, LLC (ER), used an excavator and hand tools to remove asbestos-containing materials (ACM) and asbestos-contaminated soil from the property located at 225 Eden Street. ER used hoses to wet the asbestos-contaminated soil during removal activities. A Tetra Tech Superfund Technical Assessment and Response Team (START), State of North Carolina-accredited asbestos inspector and air monitor, visually inspected the excavated driveway of 225 Eden Street for the presence of visible ACM. ER removed an additional 18 inches of soil from the driveway.



OFFICIAL PHOTOGRAPH NO. 2
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Not applicable

Date: July 26, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER hand tools to remove ACM and asbestos-contaminated soil from the tree and residential drip line areas located at 225 Eden Street. A Tetra Tech START, State of North Carolina-accredited asbestos inspector and air monitor, visually inspected the excavated these for the presence of visible ACM. ER removed additional soil in areas where ACM was visible.



OFFICIAL PHOTOGRAPH NO. 3
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Northwest

Date: July 26, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER conducted additional removal of visible ACM and associated asbestos-contaminated soil using an excavator and hand tools.



OFFICIAL PHOTOGRAPH NO. 4
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Southeast

Date: July 20, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER installed snow fencing and red "Danger Asbestos" tape along the subsurface and along the sides of the excavated driveway to identify the depth of the excavation and the presence of ACM.



OFFICIAL PHOTOGRAPH NO. 5
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

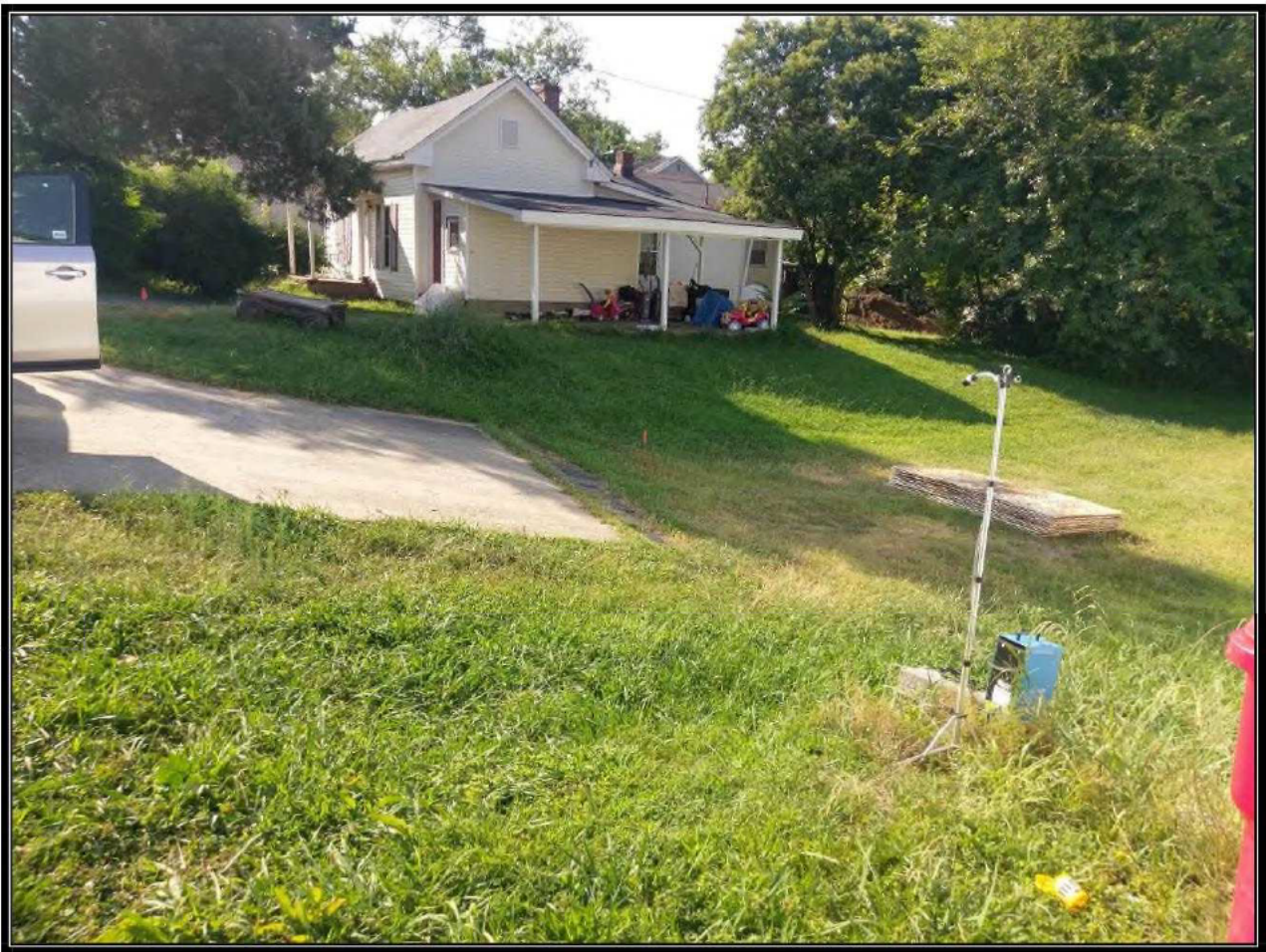
Orientation: Northwest

Date: July 26, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER installed snow fencing and red "Danger Asbestos" tape along the subsurface and along the sides of the excavated area to identify the depth of the excavation and the presence of ACM.



OFFICIAL PHOTOGRAPH NO. 6
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Southeast

Date: July 19, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: Perimeter air sampling was conducted by a Tetra Tech START, State of North Carolina-accredited air monitor, to evaluate the effectiveness of engineering and safety controls in preventing the off-site migration of asbestos fibers during removal activities.



OFFICIAL PHOTOGRAPH NO. 7
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Northeast

Date: July 31, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER installed sod and mulch in the excavated areas after backfill and topsoil were place.



OFFICIAL PHOTOGRAPH NO. 8
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	Location:	Davidson Asbestos
Orientation:	Northeast	Date:	July 21, 2017
Photographer:	Paul Prys, Tetra Tech	Witness:	None
Subject:	ER installed two layers of rock in the excavated driveway after backfill was place.		



OFFICIAL PHOTOGRAPH NO. 9
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Northeast

Date: July 26, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER used hand tools to remove ACM and asbestos-contaminated soil from underneath the southern deck and installed a layer of plastic sheeting over the area after removal was completed.



OFFICIAL PHOTOGRAPH NO. 10
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Not applicable

Date: July 28, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER installed layer of rock over the plastic sheeting over after removal was completed.